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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/904,056	07/31/1997	TODD D. LINDSEY	450.156US1	3259

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EXAMINER

NELSON, ALECIA DIANE

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/904,056

Applicant(s)

LINDSEY, TODD D.

Examiner

Alecia D. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23,26-34,37-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 23,26-34,37-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss (U.S. Patent No. 6,208,384) in view of Wang (U.S. Patent No. 5,936,612) and Hall (U.S. Patent No. 6,188,387),

With reference to **claim 33** Schultheiss teaches a method of controlling a multimedia device (40) comprising receiving a signal from a multimedia device control (62) on a mouse (50) coupled to a computer (12), receiving a signal from a computer cursor positioning device (64) on the mouse (50), sending the signals to the computer (12), and sending the multimedia device control signal from the computer to the multimedia device to provide immediate accessibility to control of the multimedia device via the mouse, wherein the immediate accessibility to the multimedia device through the computer is accessing the menu which controls the functions of the multimedia device (see Figure 4, column 5, lines 57-65).

While teaching that the multimedia device is accessed through control of the positioning device, Schultheiss fails to teach directly controlling the function of the multimedia device in a single step without a menu via the pointing device of the control. Schultheiss also fails to specifically teach that the signals from the multimedia device control and the computer cursor-positioning device are packetized as recited in the claim. However, it is well known in the art that such protocol is performed when transferring signals

Wang teaches a computer input device in the form of a mouse (20), wherein the mouse makes it possible for a user to interact with a class of rotatable graphic objects for use as control. The user is allowed to control the volume of a speaker connected to the host computer by rotating knob image (96). The rotation of the knob image can be directly controlled by the rotation of mouse (20) on the surface (30). As the mouse is rotated clockwise about an axis (42) from an initial position (98) to a final position (100), the knob image is rotated clockwise from an initial position to a final position (see column 10, lines 46-61).

Hall teaches data transmission from a mouse to a host computer (see abstract) so as to transmit mouse activity through the cable (5) whenever there is a change in the mouse. A change of state is defined as any motion of the mouse or any change in the position of either of its buttons (see column 3, lines 8-21).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the signals from the computer cursor positioning device to be packetized and transmitted to a host computer similar to that which is taught by Hall,

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in a system similar to that which is taught by Schultheiss, wherein the control device directly controls functions of the multimedia as taught by Wang in order to control the functions of the multimedia device at a faster rate and in a manner much more convenient for the user. .

3. **Claim 45** is rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss in view of Wang and Hall as applied to **claim 33** above, and further in view of Schindler et al. (U.S. Patent No. 5,900,867).

With reference to **claim 45**, Schultheiss teaches the usage of keys (62) for providing a broad range of conventional television remote control commands (see column 5, lines 54-55). As well known in the art, volume control is well known conventional television remote control commands. Wang teaches the usage of the mouse (20) for controlling the volume of a speaker connected to the host computer (see column 10, lines 52-53).

Schultheiss and Wang however fail to specifically teach that the multimedia control device comprises a volume control slider or wheel.

Schindler et al. teaches the usage of channel control buttons (916) and volume control (918), as well as thumbwheel (934). It is taught that thumbwheel (934) is used to adjusting the power of the RF signal (see column 14, lines 33-37).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the thumbwheel of Schindler et al. to have the ability to be used as a volume control for the multimedia device, wherein both Schultheiss, Wang,

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and Schindler et al. teaches volume control. It would be obvious to allow for such modification because it is well known to those skilled in the art interchangeably using switches, buttons, sliders, wheels, trackball, ect. as input devices. This would allow for arrangement, which may be more comfortable for the user to manipulate.

4. **Claims 23, 32, 34, 39, and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss in view of Wang and Applicant's admitted prior art.

With reference to **claims 23 and 41**, Schultheiss teaches a mouse device (50) for a computer (10) operatively coupled to a multimedia device (40) comprising: a housing (52), a mouse button (66a, 66b) within the housing to control an operation on the computer (12), a cursor control device (64) coupled to the housing (52), at least one multimedia control device (62) disposed within the housing (52) to control only the multimedia device through the computer (12), a connection that transmits signals generated by the mouse button, cursor control device, and multimedia control device to the computer (see column 5, lines 23-56); and wherein the at least one control device provides immediate accessibility to the multimedia device through the computer, wherein the immediate accessibility to the multimedia device through the computer is accessing the menu which controls the functions of the multimedia device (see column 5, lines 57-65). With further reference to **claims 34 and 39**, Schultheiss teaches that the computer (12) has a processor (20, 20a) and a memory (32) (see column 4, lines 60-68). Further it is taught the usage of a connection that operatively couples the pointing

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device to the computer through a port of the computer through which all communication between the pointing device and the computer occurs (see column 5, lines 23-43).

While teaching that the multimedia device is accessed through control of the positioning device, Schultheiss fails to teach directly controlling the function of the multimedia device in a single step without a menu via the pointing device of the control. Also, while Schultheiss teaches the usage of a computer incorporating a CD-ROM, the CD-ROM is described in relation to the memory device, as opposed to a multimedia device as recited in the claim. However, it is well known in the art for a computer to include a CD-ROM as well as DVD capabilities.

Wang teaches a computer input device in the form of a mouse (20), wherein the mouse makes it possible for a user to interact with a class of rotatable graphic objects for use as control. The user is allowed to control the volume of a speaker connected to the host computer by rotating knob image (96). The rotation of the knob image can be directly controlled by the rotation of mouse (20) on the surface (30). As the mouse is rotated clockwise about an axis (42) from an initial position (98) to a final position (100), the knob image is rotated clockwise from an initial position to a final position (see column 10, lines 46-61).

Moreover, admitted prior art teaches that multimedia applications for computer typically come installed with at least one audio and/or video device, wherein it is further stated that CD-ROMs drives are common and allow computer users to play audio and video which reside on CD-ROMs inserted into the drive (see page 1, line9-page 2, line1).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the multimedia device to be incorporated within the house of the computer as discussed in the admitted prior art, which can be controlled by a mouse device having direct control as described by Wang, when controlling multimedia devices according to Schultheiss in order to thereby provide a mouse device which is capable of controlling a multimedia device integrated within the computer which allows for easier control over the multimedia device to the user.

With reference to **claim 32**, Schultheiss teaches the usage of trackball (64) as the cursor control device, and further states that it is well known in the art that other user inputs may be used other than trackball (64) (see column 5, lines 28-30) which includes a mouse, touch pad, or joystick.

5. **Claims 26, 37, and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss in view of Wang and Applicant's admitted prior art as applied to **claims 23, 34, and 41** above, and further in view of Hall.

With reference to **claims 26 and 42**, Schultheiss, Wang, and the admitted prior art teach all that is required as explained above with reference to **claims 23 and 41**. Schultheiss further teaches with reference to **claim 42**, the usage of radio frequencies (see column 5, lines 30-43).

Schultheiss, Wang, and the admitted prior art fails to specifically teach that the signals from the multimedia device control and the computer cursor-positioning device

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are packetized as recited in the claim. However, it is well known in the art that such protocol is performed when transferring signals.

Hall teaches data transmission from a mouse to a host computer (see abstract) so as to transmit mouse activity through the cable (5) whenever there is a change in the mouse. A change of state is defined as any motion of the mouse or any change in the position of either of its buttons (see column 3, lines 8-21)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the signals from the computer cursor positioning device to be packetized and transmitted to a host computer similar to that which is taught by Hall, in a system similar to that which is taught by Schultheiss, Wang, and the admitted prior art in order to control the functions of the multimedia device at a faster rate.

With reference to **claim 37** Schultheiss, Wang, and the admitted prior art teach all that is required as explained above with reference to **claim 34**, however fail to specifically teach that the signals from the multimedia device control and the computer cursor-positioning device are packetized as recited in the claim. However, it is well known in the art that such protocol is performed when transferring signals.

Hall teaches data transmission from a mouse to a host computer (see abstract) so as to transmit mouse activity through the cable (5) whenever there is a change in the mouse. A change of state is defined as any motion of the mouse or any change in the position of either of its buttons (see column 3, lines 8-21)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the signals from the computer cursor positioning device to be packetized and transmitted to a host computer similar to that which is taught by Hall, in a system similar to that which is taught by Schultheiss, Wang, and the admitted prior art in order to control the functions of the multimedia device at a faster rate.

6. **Claims 27-31, 38, 40, 43, 44, and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss in view of Wang and Applicant's admitted prior art as applied to **claims 23, 34, and 41** above, and further in view of Schindler et al. (U.S. Patent No. 5,900,867).

With reference to **claims 27 and 38**, Schultheiss, Wang, and the admitted prior art fail to teach the usage of a serial port on the computer however the usage of a port is well known in the art as a type of connection.

Schindler et al. teaches an entertainment system using a personal computer as the heart of the system wherein the personal computer contains suitable receiving circuitry, which provides indications of the keys being pressed, being a serial connection or other form of connection (see column 5, lines 34-41).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow for the computer device as taught by Schultheiss, Wang, and the admitted prior art to include a serial port as suggested by Schindler et al. in order to provide a source for receiving the signals from the multimedia control and the

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cursor control in order for the signals to be processed for carrying out the appropriate function of the multimedia device (see column 5, lines 34-41).

With reference to **claims 28, 44, and 46**, Schultheiss teaches the usage of keys (62) for providing a broad range of conventional television remote control commands (see column 5, lines 54-55). As well known in the art, volume control is well known conventional television remote control commands. Wang teaches the usage of the mouse (20) for controlling the volume of a speaker connected to the host computer (see column 10, lines 52-53).

Schultheiss and Wang however fail to specifically teach that the multimedia control device comprises a volume control slider or wheel.

Schindler et al. teaches the usage of channel control buttons (916) and volume control (918), as well as thumbwheel (934). It is taught that thumbwheel (934) is used to adjusting the power of the RF signal (see column 14, lines 33-37).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the thumbwheel of Schindler et al. to have the ability to be used as a volume control for the multimedia device, wherein both Schultheiss, Wang, and Schindler et al. teaches volume control. It would be obvious to allow for such modification because it is well known to those skilled in the art interchangeably using switches, buttons, sliders, wheels, trackball, ect. as input devices. This would allow for arrangement, which may be more comfortable for the user to manipulate.

With reference to **claim 29-31**, Schultheiss teaches that the multimedia control device comprises multiple actuators (keys 58, 62, 66) for directly controlling functions of tuning and other television functions (see column 5, lines 23-65, column 6, lines 63-68), wherein the functions are any of a broad range of conventional television remote control commands (see column 5, lines 54-55), which would be obvious to include next/previous channel and preset stations. Further, Wang teaches the usage of the mouse (20) for controlling the volume of a speaker connected to the host computer (see column 10, lines 52-53).

Schultheiss fails to specifically teach that the multimedia control device comprises multiple actuators for directly controlling functions of a CD-ROM device or speaker, wherein one or more such functions are selected from a group of conventional functions.

Schindler et al. teaches that one of the multimedia devices consist of a CD jukebox (168) and stereo-surround sound system (158) for audio output to one or more speakers (160).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow for the CD and speaker devices of Schindler et al. to have the ability to have conventional control functions, which are well known to those skilled in the art, and as suggest by Schultheiss and Wang in order to provide the user with a more accessible manner for controlling the functions of a plurality of different device from one control device.

With reference to **claims 40 and 43**, Schultheiss, Wang, and the admitted prior teach all that is required as explained above with reference to **claim 34**, however fails to teach the usage of an amplifier coupled to at least one of a speaker, radio tuner, television tuner, or an optical display player. While Schultheiss and Wang teach a plurality of multimedia control devices for controlling different multimedia devices, there fails to be teachings of the multimedia control devices being located on different parts of the housing.

Schindler et al. teaches the usage of amplified speakers (1624) (see column 21, lines 7-9). Schindler et al. also teaches a plurality of multimedia control devices for controlling a plurality of different multimedia devices wherein some of the buttons are located on the top of the housing and wherein a selection button (913) is provided under the housing. Moreover, location of the multimedia control devices is designer's choice, wherein it would be obvious to allow the buttons to be placed in various positions of the device for more convenient control for the user.

Therefore it would have been obvious to allow the usage of an amplifier to be used with the speakers wherein the control buttons are located on the control device similar to that which is taught by Schindler et al. in a system similar to that which is taught by Schultheiss, Wang, and the admitted prior art in order to improve the sound be emitted from the speakers when playing audio on the system.

Response to Arguments

7. Applicant's arguments with respect to ***claims 23, 26-34, 37-46*** have been considered but are moot in view of the new ground(s) of rejection.

With regards to applicant's arguments towards Schindler et al. not being prior art; the current application was filed 7/31/97, Schindler et al. was published 5/4/99, which is more than one year prior to the filing of the application, thereby qualifying the reference as prior art under 102(b). Therefore the rejections covered by the teachings of Schindler et al. have been maintained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703) 305-0143. The examiner can normally be reached on Monday-Friday 9:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adn/ADN
December 18, 2004

AMR A. AWAD
PRIMARY EXAMINER
